

**PA-0046 US**

What is claimed is:

1. A combination comprising a plurality of cDNAs wherein the cDNAs are SEQ ID NOs:1-365 that are differentially expressed in MYCN activated cells and the complements of the nucleic acid sequences of SEQ ID NOs:1-365.
- 5 2. The combination of claim 1, wherein the MYCN activated cells are neuroblastoma.
3. A method for using a combination comprising a plurality of cDNAs to detect expression of one or more nucleic acids in a sample, the method comprising:
  - a) hybridizing the combination of claim 1 with nucleic acids of the sample, thereby forming one or more hybridization complexes; and
  - 10 b) detecting complex formation wherein complex formation indicates expression of at least one nucleic acid in the sample.
4. The method of claim 3, wherein the combination is immobilized on a substrate.
5. The method of claim 3, wherein the nucleic acids of the sample are amplified prior to hybridization.
6. The method of claim 3, wherein the sample is from a subject with neuroblastoma and comparison with a standard defines the stage of that disorder.
- 15 7. A method of using a combination comprising a plurality of cDNAs to screen a plurality of molecules or compounds to identify a ligand which specifically binds at least one cDNA of the combination, the method comprising:
  - a) contacting the combination of claim 1 with the plurality of molecules or compounds under conditions to allow specific binding; and
  - 20 b) detecting specific binding between at least one cDNA and at least one molecule or compound, thereby identifying a ligand that specifically binds to a cDNA of the combination.
8. The method of claim 7 wherein the plurality of molecules or compounds are selected from DNA molecules, RNA molecules, peptide nucleic acid molecules, mimetics, peptides, transcription factors, repressors, and regulatory proteins.
- 25 9. An isolated cDNA selected from the SEQ ID NOs:1-365.
10. A vector containing the cDNA of claim 9.
11. A host cell containing the vector of claim 10.
12. A method for producing a protein, the method comprising the steps of:
  - 30 a) culturing the host cell of claim 11 under conditions for expression of protein; and
  - b) recovering the protein from the host cell culture.
13. A method for using a cDNA to detect expression of a complementary nucleic acid in a sample, the

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method comprising:

- a) hybridizing the cDNA of claim 9 with the sample, thereby forming a hybridization complex; and
- b) detecting complex formation wherein complex formation indicates expression of a complementary nucleic acid in the sample.

5 14. A method of using a cDNA to screen a plurality of molecules or compounds to identify a molecule or compound which specifically binds the cDNA, the method comprising:

- a) contacting the cDNA of claim 9 with the plurality of molecules or compounds under conditions to allow specific binding; and

- b) detecting specific binding between the cDNA and at least one molecule or compound, thereby identifying a molecule or compound that specifically binds the cDNA.

10 15. A protein produced by the method of claim 12.

16. A method for using a protein to screen a plurality of molecules or compounds to identify at least one ligand which specifically binds the protein, the method comprising:

- a) combining the protein of claim 15 with the plurality of molecules or compounds under conditions to allow specific binding; and

- b) detecting specific binding between the protein and a molecule or compound, thereby identifying a ligand which specifically binds the protein.

17. The method of claim 16 wherein the plurality of molecules or compounds is selected from DNA molecules, RNA molecules, peptide nucleic acid molecules, mimetics, peptides, proteins, agonists, antagonists, antibodies or their fragments, immunoglobulins, inhibitors, drug compounds, and pharmaceutical agents.

20 18. An antibody which specifically binds the protein of claim 15.

19. A method of using a protein to produce and purify an antibody, the method comprising:

- a) immunizing an animal with the protein of claim 15 under conditions to elicit an antibody response;
- b) isolating animal antibodies;

25 c) contacting the protein with the isolated antibodies under conditions to allow specific binding;

- d) recovering the bound protein; and

- e) separating the protein from the antibody, thereby obtaining purified antibody.

20 20. A method of using an antibody to detect a protein in a sample, the method comprising:

- a) contacting the antibody of claim 18 with a sample under condition for the formation of an antibody:protein complex, and

- b) detecting the antibody:protein complex wherein complex formation indicates the presence of the protein in the sample.